

Mr. G. Bower, paid particular attention to the servicing aspect of the aircraft, and detachable panels are provided at all appropriate points. For example, there are fourteen inspection covers in all on wings and fuselage for examination of the push-rod control system. The crash-proof fuel tanks are mounted on the hinged doors which give access to their compartments and they may thus be swung open for inspection. Engine cowlings can be removed entirely without disturbing the airscrews, and both nose and tail portions of the fuselage are detachable.

Reid and Sigrist test pilot, Mr. J. A. Hart, flew the Desford for the accompanying photographs.

#### MAKERS' DATA FOR THE REID and SIGRIST DESFORD Two D.H. Gipsy Major Engines.

Span	...	...	...	...	...	...	...	...	34ft
Length	...	...	...	...	...	...	...	...	25.5ft
Height	...	...	...	...	...	...	...	...	8.1ft
Wing Area	...	...	...	...	...	...	...	...	186 sq. ft
All-up Weight	...	...	...	...	...	...	...	...	3,300lb
Wing loading	...	...	...	...	...	...	...	...	17.75lb/sq. ft
Power loading	...	...	...	...	...	...	...	...	12.7 lb/h.p.
Max. speed	...	...	...	...	...	...	...	...	160 m.p.h.
Cruising speed	...	...	...	...	...	...	...	...	140 m.p.h.
Fuel capacity	...	...	...	...	...	...	...	...	44 gallons
Range	...	...	...	...	...	...	...	...	460 miles
Climb	...	...	...	...	...	...	...	...	1,100 ft/min
Service ceiling	...	...	...	...	...	...	...	...	17,700ft



The Viscount prototype, showing the slim nacelles for the Rolls-Royce Dart turboprops.

## Another British First

### Initial Flight of Vickers Viscount with Transport Turboprop

A REMARK by Captain J. Summers, Vickers' chief test pilot, that the new Viscount transport, powered by four Rolls-Royce Dart turboprop units, is "the smoothest and best" machine he has ever flown, can well be believed. He commented in this vein after landing from the initial flight of the Viscount prototype on July 16th, having been airborne for some 20 minutes.

Features of the Viscount—the world's first airliner to be driven by turboprops—were discussed in *Flight* of November 20th, 1947, and the latest technical data, relative to both the Dart and Naiad-powered versions, appear on this page. Planned from the outset as a successor to the Viking, the Viscount can be arranged as a 32- or 36-seater. In the former case the cabin is divided into two saloons, the forward seating 12, and the aft seating 20, passengers. Between the saloons is the pantry. A large door is provided at each end of the cabin, and adjacent to each door is a cloakroom for clothing and hand baggage. There are two toilet compartments, one at each end of the cabin. Provision is made for a crew of four, including a steward, and for full radio and navigational aids.

With the exception of the extreme tail and nose-wheel housing the entire fuselage is pressurized to a differential of  $6\frac{1}{2}$  lb/sq in. This pressure maintains ground level conditions up to a height of 15,000ft.

It will be seen in the accompanying photograph that the cabin has large elliptical windows, the Vickers technical staff having found that an elliptical hole requires the smallest weight replacement to make an effective seal for a pressurized fuselage. A single reinforced member around each window has proved adequate. Another unusual feature, considering the civil nature of the aircraft, is the form of the pilot's cockpit enclosure, resulting in an unusually wide field of view, despite pressurizing.

In the Viscount Great Britain possesses a medium air-

liner of exceptional promise. Due to the adoption of the Ambassador by B.E.A., however, no decision has yet been made concerning production.

The Viscount is one of a number of new civil aircraft scheduled to appear at Farnborough during September.

#### VICKERS VISCOUNT DATA

					Dimensions		Power Plant	
							Dart	Naiad
Span	...	...	...	...	...	...	89ft 0in	89ft 0in
Length	...	...	...	...	...	...	74ft 6in	74ft 6in
Height	...	...	...	...	...	...	26ft 3in	26ft 3in
Wing area	...	...	...	...	...	...	885 sq ft	885 sq ft
					Weights			
Normal all-up weight	...	...	...	...	...	...	40,500 lb	43,500 lb
Empty or basic	...	...	...	...	...	...	27,450 lb	27,700 lb
Disposable load	...	...	...	...	...	...	13,050 lb	15,800 lb
Landing weight (maximum)	...	...	...	...	...	...	39,000 lb	39,000 lb
					Loadings			
Wing loading	...	...	...	...	...	...	45.75 lb/sq ft	49.1 lb/sq ft
					Capacities			
Fuel	...	...	...	...	...	...	1,200 gal.	1,200 gal.
Oil	...	...	...	...	...	...	14 gal.	14 gal.
					Performance			
Maximum speed	...	...	...	...	...	...	331 m.p.h.	370 m.p.h.
at height	...	...	...	...	...	...	20,000ft	25,000ft
Recommended cruising	...	...	...	...	...	...	276 m.p.h.	316 m.p.h.
at height	...	...	...	...	...	...	20,000ft	25,000ft
Rate of climb at sea level	...	...	...	...	...	...	1,675 ft/min.	1,890 ft/min.
Rate of climb at sea level (one engine stopped)	...	...	...	...	...	...	950 ft/min.	1,150 ft/min.
Service ceiling	...	...	...	...	...	...	30,000ft	30,000ft
Take-off to 50ft (minimum) at maximum weight	...	...	...	...	...	...	950yds	950yds
Landing from 50ft (minimum) at maximum weight	...	...	...	...	...	...	900yds	900yds
Still-air range	...	...	...	...	...	...	1,725 miles	1,725 miles
at height of	...	...	...	...	...	...	20,000ft	25,000ft
					Fuel Consumption			
Cruising consumption	...	...	...	...	...	...	192 gal./hr.	220 gal./hr.